Ralph Nery State of North Carolina Utilities Commission Raleigh, North Carolina 27602

Dear Mr. Nery:

This refers to the Commission's Order in Docket No. G-33, issued June 30, 1976, granting the City of Wilson a waiver from the cathodic protection requirements of 49 CFR 192.457(b) until August 1, 1979, for 18.2 miles of coated and wrapped main, 4 miles of bare main, 1,419 coated and wrapped service lines, and 198 bare steel services. The Order has been assigned OPSO Docket No. NC-76-4.

As you know, the authority of a State agency under Sec. 3(e) of the Natural Gas Pipeline safety Act of 1968 to grant waivers from the Federal standards is conditioned upon the state agency giving the Secretary "written notice at least 60 days prior to the effective date of the waiver." Sec 3(e) further provides that if the Secretary objects in writing before the effective date of a waiver, the State agency action granting the waiver will be stayed. Normally, the 60-day or longer period within which the Secretary may object begins to run when the Department receives a letter transmitting a State agency waiver for our review. In our normal business routine, that letter and waiver is then immediately assigned for acknowledgement and response within a designated time. In this docket, however, the Commission Order, which we received by mail on July 2, 1976, was not accompanied by a letter of transmittal. As a consequence, the matter was not immediately assigned for action in the course of our normal business routine, and we did not begin our review until recently. Under these circumstances, we believe that the Secretary's statutory period for review of the Commission's action began when we identified the Order as a State waiver requiring our review and that the period has not yet expired.

We have reviewed the Order and substantiating information. The City of Wilson has not presented any reasons to show that Section 192.457(b) is inappropriate or why it could not meet the codified deadline for compliance. Thus, information has not been presented to show that the City's proposed program to spend \$20,000 for the next three years on corrosion control, now that enforcement action is pending, justifies a waiver. We, therefore, object to the granting of the waiver.

In that both OPS and State agency compliance efforts include discretionary action to defer imposition of penalty or other sanction while an operator executes a plan for compliance, the Commission may wish to take into account the effort which the City of Wilson has made toward meeting compliance with Section 192.457(b) in determining the nature and extent of its enforcement action.

In accordance with Section 3(e) of the Act, the Commission's action is hereby stayed. The Commission may appeal this decision and request an opportunity for a hearing within 60 days from the date of this letter.

Sincerely, Cesar DeLeon Acting Director Office of Pipeline Safety Operations

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH, NORTH CAROLINA

DOCKET NO. G-33

BEIORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
City of Wilson, North Carolina - Application for)	
Waiver of Effective Date for Complying With)	ORDER
Section 192.457(b), Part 192, Title 49, Code of)	GRANTING
Federal Regulations)	WAIVER

BY THE COMMISSION: The minimum Federal safety standards for pipeline facilities and the transportation of gas, 49 CFR 192, et. seq., were made applicable to all natural gas public utilities and municipal natural gas facilities in North Carolina by Commission Order in Docket No. G-I00, Sub 13, dated December 30, 1970, and issued pursuant to U.S. 62-50. The Commission has entered into an agreement with and has been certified by the United States Department of Transportation, pursuant to 49 USCA 01674(a) and (b), to regulate and/or inspect all natural gas and pipeline facilities in North Carolina for compliance with the minimum Federal safety standards.

49 USCA 41672(e) provides in part as follows:

"(a) State Agency with respect to which there is in effect a certification pursuant to section 1674(a) of this title or an agreement pursuant to section 1674(b) of this title, may waive compliances with a safety standard in the same manner as the Secretary [of Transportation], provided such State Agency gives the Secretary written notice at least sixty days prior to the effective date of the waiver."

On June 14, 1976, the City of Wilson, North Carolina (hereinafter referred to as the City or Wilson), filed with this Commission an application seeking waiver of the effective date for compliance with certain requirements of the minimum Federal safety standards, to wit: 49 CFR 192, Subpart I, dealing with external corrosion control of buried or submerged pipelines.

Section 192.457(b)(3) of Subpart I provides that bare or coated distribution pipelines installed prior to August 1, 1971, must, not later than August 1, 1976, be cathodically protected "in areas in which active corrosion is found." It further provides that "the operator shall determine the, areas of active corrosion by electrical survey, or where electrical survey is impractical, by the study of corrosion and leak history records, by leak detection survey or by other means."

Wilson requests the Commission to extend the deadline for compliance with the requirements of 49 CFR 192.457(b)(3) from August 1, 1976, to August 1, 1979.

The Gas Section of the Commission Engineering Staff reports that Wilson has 27 miles of coated and wrapped steel mains, 24 miles of bare steel mains, 5,219 coated and wrapped steel services, 198 bare steel services, and 322 plastic or copper services. Since the major part of its system is under pavement, the City has chosen to cathodically protect all of its coated and wrapped steel mains and to use leak history records instead of electrical surveys to determine areas of active corrosion on its bare mains.

The Staff also reports that the City conducts system wide leakage surveys at least once every three years, semiannually in areas where active corrosion is found, and the City is presently obtaining information on the installation of large diameter plastic pipe to augment its corrosion protection program.

In support of its application the City shows that as of June 14, 1976, 68.8 miles of mains comprising 62% of its coated and wrapped mains were under cathodic protection. A rectifier has been installed to protect an additional 8.9 miles of mains, but the City must eliminate shorts and insulate couplings before protection is completed.

In August 1975, the City determined that 4.75 miles of bare mains existed in areas of active corrosion. As of June 14, 1976, 0.75 miles of these mains had been replaced with coated and wrapped steel and were under cathodic protection. According to the City's leak history records; there is no active corrosion on the remaining 20 miles of bare mains.

Wilson proposes the following program to achieve system compliance by the end of the waiver period:

DATE ANNUAL EXPENDITURES		PERCENTAGE OF PROTECTION		
1976-77	\$20,000.00	75%		
1977-78	20,000.00	85%		
1978-79	20,000.00	100%		

The City states that it plans to achieve compliance with the minimum Federal standards by installing anodes, replacing hare mains and services, insulating valves and fittings, installing test stations, and maintaining that portion of the system which is already in compliance.

Based upon the foregoing, the application filed by the City, and the entire record in this matter, the Commission makes the following

FINDINGS OF FACT

- 1. That the City of Wilson, North Carolina, operates a natural gas distribution system subject to the gas pipeline safety jurisdiction of this Commission.
- 2. That .the City's distribution system consists of 111 miles of mains, of which. 87 miles are coated and wrapped steel and 24 miles are bare steel system by August 1, 1979
- 3. That the City intends to cathodically protect all of its coated and wrapped steel system by August 1, 1979.
- 4. That as of June 14, 1976, 68.8 miles of mains comprising 62% of the City's coated and wrapped steel system were under cathodic protection.
- 5. That a rectifier has been installed which will cathodically protect an additional 8.9 miles of the City's coated and wrapped steel system when shorts are eliminated and couplings insulated.
- 6. That the City has determined on the basis of leak history records that active corrosion presently exist E2 tala Lamiles of the 20 miles of hare mains.
- 7. That until protection or replacement occurs; the City intends to continue its leak surveys on a semiannual basis in those and other areas of hare mains where active corrosion is found.
- 8. That the City proposes to continue a program of corrosion control which, when completed, will meet the requirements of 49 CFR 192.457(b).

Based upon the foregoing Findings of Fact, the commission reaches the following

CONCLUSIONS

- 1. That a three-year extension of the effective date of compliance with the requirements of 49 CFR 192.457(b) is necessary in order to allow the City of Wilson to complete its program of cathodic protection and is not inconsistent with gas pipeline safety.
- 2. That a program of plastic insertion and replacement of bare mains is an effective means of protecting these lines against corrosion leaks, is not inconsistent with gas pipeline safety, and should continue until the entire system. is

brought under cathodic protection.

IT IS, THEREFORE, ORDERED AS FOLLOWS:

- 1. That the City of Wilson be, and hereby is, granted a waiver of the effective date of compliance with the minimum Federal safety standards for pipeline facilities and the transportation of gas, 49 CFR 192.457(b), from August 1, 1976, to August 1, 1979, provided:
 - (a) That Wilson shall continue a program of installing anodes, replacing rare mains and services, insulating valves and fittings, eliminating shorts, installing test stations, and conducting annual cathodic protection maintenance surveys.
 - (b) That Wilson shall conduct leak surveys on all unprotected steel facilities at least once every three years, annually in business areas, and semiannually in areas where active corrosion has been found.
- 2. That during the waiver period the City of Wilson shall file with the Commission a progress report on the form entitled "NCUC Waiver Report" and attached hereto as Appendix I. The first report, for the period ending August 1, 1976, shall be filed not later than August 15, 1976. Thereafter, all reports shall be filed semiannually for the periods ending February 1 and August 1, not later than February 15 and August 15, respectively.
- 3. That a copy of this Order shall be forwarded to the Secretary of the Department of Transportation to constitute written notice of the waiver to be granted herein, and that this Order shall become effective 60 days from the date of receipt by the office of the Secretary of the Department of Transportation.

ISSUED BY ORDER OF THE COMMISSION.

This 30th day of June, 1976.

NORTH CAROLINA UTILITIES COMMISSION Katherine M. Peele, Chief Clerk

NORTH CAROLINA UTILITIES COMMISSION GAS SECTION ANALYSIS OF APPLICATION BY CITY OF WILSON FOR WAIVER FO COMPLIANCE TO 49 CFR 192.457(b)

EXHIBIT NO. 2

The City of Wilson (Wilson), 12 North Goldsboro Street, P.O. Box 10, Wilson, North Carolina 27893, telephone number: 919/237-2121, a municipal operator of a Natural Gas facility within the state of North Carolina, has petitioned the North Carolina Utilities Commission requesting a waiver of the requirements of 49 CFR 192.457(b) to extend the date of compliance of said regulation from August 1, 1976 to August 1, 1979.

The Gas Section herewith reports the following in response to that petition and recommends that a waiver be granted based on the following information and analysis.

The regulation requirement which pertains to this waiver request sets forth that, in areas where active corrosion is found, pipelines installed prior to August 1, 1971 shall be cathodically protected on or before August 1, 1976. Subsection 192.457(b)3 further provides that active corrosion shall be determine by "electrical survey, or where electrical survey is impractical, by the study of corrosion in leak history records, by leak detection survey or by other means."

As outlined in the amended waiver petition dated June 14, 1976 and attached hereto, Wilson had determined that all coated and wrapped steel pipe would be cathodically protected and that because of extensive paving in bare steel main locations, areas of active corrosion were determined by the plotting and monitoring of corrosion leaks in said bare main areas. The analysis by Wilson of corrosion and leak history in areas where electrical survey is impractical has resulted in the designation by Wilson areas of active corrosion on 4.75 miles of bare mains.

Presently, Wilson has 87 miles of C/W steel mains, 24 miles of bare steel mains, 6,219 C/W steel services, 198 bare steel services, and 322 plastic or copper services. Of these 68.8 miles of mains and over 3,000 service lines are presently cathodically protected. An additional 8.9 miles of coated mains and approximately 800 service lines are under the influence of a rectifier but are not yet fully protected.

Section 6(b) of Wilson's waiver petition outlines the city's annual expenditures and percentage of mains cathodically protected since 1973. Section 7 outlines Wilson's proposal for obtaining compliance to 192.457(b) during the next three years. To supplement the proposed cathodic protection, and in lieu of compliance by the August 1, 1976 date, Wilson conducts system wide leakage surveys at least every three years. Wilson further reports that their steel mains where areas of active corrosion are found are and will be surveyed for leaks on a semi-annual basis until protection or replacement occurs.

Presently Wilson is obtaining information on the installation of plastic mains to augment corrosion and leakage programs. Plastic insertion and replacement shall greatly accelerate cathodic protection procedures in eliminating corrodible steel piping.

From the information supplied in the June 14, 1976 waiver petition by the City of Wilson and from the general record of the City of Wilson, the Gas Section Concluded the following:

- 1. The City of Wilson has interpreted its corrosion control program in a manner which meets or exceeds the minimum federal safety requirements.
- 2. The City of Wilson presently has 68.8 miles (62% of its system under cathodic protection and proposes in the next three years to protect a minimum of 22.2 miles of main and associated services. In that 20 miles of bare mains

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The public should not be as adversely affected by the waiver extension in that leakage surveys are and will be performed at an accelerated rate.

Therefore based on the foregoing, the Gas Section Staff recommends that the Commission grant a Waiver of Compliance to the effective date of 49 CFR 192.457(b) providing that:

- (a) Wilson conduct Leakage Surveys on all unprotected steel facilities at least once every three years; and
- (b) Wilson file a report of progress on form attached on a semi-annual basis each August 1 and February 1 for the duration of the Waiver Period.

City of Wilson North Carolina 27893

June 14, 1976 DOCKET NO. G33

CITY OF WILOSN, NORTH CAROLINA AMMEND FILING OF PETITION FOR WAIVER TO THE REQUIREMENTS OF 49 CFR 192.457(b) APPLICATION FOR WAIVER TO SECTION 192.457(b) OF PART 192, TITLE 49, CODE OF FEDERAL REGULATIONS.

Below is the information filed by the City of Wilson as outlined by the Gas Section the North Carolina Utilities Commission as minimum data in support of a waiver request to Subpart I.

- 1. City of Wilson, 112 North Goldsboro Street, Post Office Box 10, Wilson, North Carolina 27893, Telephone Number 237-2121.
- 2. Attached is a detailed description of the facilities to be protected during the waiver period and a map of the Wilson system showing all facilities and their cathodic protection status.
- 3. We are hereby requesting a waiver of 49 CFR, Part 192, Section 192.457(b) specifically August 1, 1976 deadline for compliance with the provisions of Sections 192.457, 192.469 and 192.471.
- 4. We are requesting a proposed waiver of 49 CFR, Part 192, Section 192.457 (b) substituting August 1, 1979 for August 1, 1976, giving a three (3) year extension to come in compliance with D.O.T. Regulations of Subpart I.
- 5. (a) Since 1959, we have been installing insulated stops and swivels, and insulating meters; however due to the highly technical training required for a complete corrosion protection program, we found it necessary to consult and outside engineering firm. Because of this, it was not until the latter part of 1973 that we were able to begin an active corrosion protection program.
 - (b & c) In that Subsection (b)(3) of Section 192.457 generally provides that buried or submerged distribution pipelines installed prior to August 1, 1971 must be cathodically protected "in areas in which active corrosion is found" and that Subsection (b)(3) further provides that 'the operator shall determine the areas of active corrosion by electrical survey or, where electrical survey is impractical, by the study of corrosion and leak history records, by leak detection survey or by other means", The City of Wilson has found that majority of its system is under pavement (either asphalt or concrete) and that electrical survey to determine areas of active corrosion was therefore impractical. Wilson chose instead to cathodically protect all its coated steel mains and to use corrosion leak history records to find areas of active corrosion on the care steel mains. In August, 1975, Wilson found that active corrosion could be denoted on 4.75 miles of bare mains and the City began to protect or replace these sections. As of June, 1976, .75 miles were replaced with coated and wrapped steel and cathodically protected. The remaining miles of bare steel mains, where active corrosion was denoted are surveyed for leaks semi-annually and will continue to be leak surveyed semi-annually until replaced. The twenty (20) miles of bare steel mains where the plotting of leaks has not shown active corrosion will be leak surveyed at least every three (3) years and mains with areas of active corrosion replaced or protected as they present themselves.
- 6. (a) Since our cathodic protection program began in 1973, Wilson has installed cathodic protection on 62% (68.8 miles of main and associated service lines) of our total gas system. There are 18.2 miles of coated and wrapped mains and associated service lines to be protected. Of those, 8.9 miles are under the influence of a rectifier but we must eliminate some shorts and insulting couplings to achieve protection. As noted above, 20 miles of bare mains have no active corrosion according to corrosion leak history and 4 miles of bare steel mains are designated as areas of active corrosion to which cathodic protection has not been presently applied.

(b)We were able to achieve compliance of the 62% of our system by installing rectifiers and anodes. We also insulated valves and all of our meters. Test stations have been installed and bare mains and services have been replaced with new coated pipe.

Annual expenditures and percent of protection are as follows:

1973	-	\$2,322.28	-	0%
1974	-	8,495.19	-	28%
1975	-	32,263.64	-	59%
1976	-	14,750.93	-	62%

7. In order to achieve compliance of entire system, the following program is proposed for the three (3) year extension.

Annual expenditures and percent of protection

August 1,	1976-77	-	\$20,000.00	-	75%
	1977-78	-	20,000.00	-	85%
	1978-79	-	20,000.00	-	100%

We plan to archive compliance through installation of anodes, replacing bare mains and services, insulating valves and fittings, installing test stations, and maintaining the system previously in compliance.

- 8. Enclosed also are the applicable sections from the Operators OPM Manual 192.457; 192.467; 192.469; 192.471.
- 9. We have no rule changes proposed as of date.